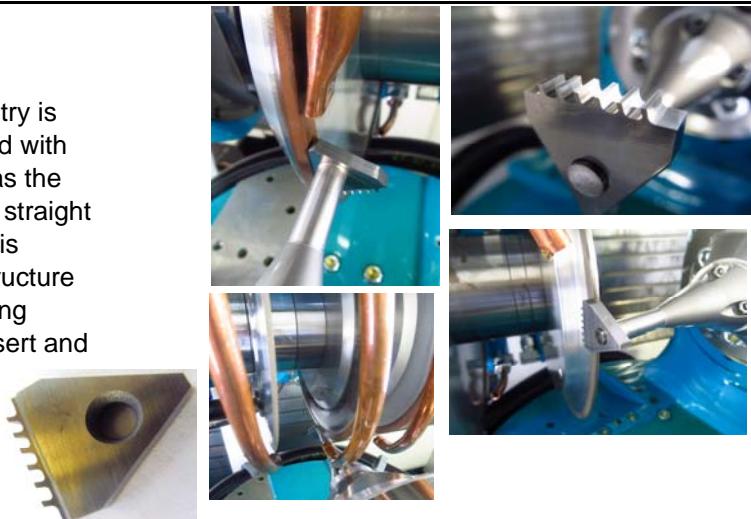


Compression Ring Groove Insert

A08-200

This specific multigrooving profile of automotive industry is ground from a V-shaped 22 large mm blank. Clamped with TTC, reference face operations, chipbreaker as well as the profile can be ground in one setup. In order to keep a straight bottom while using a standard wheel the chipbreaker is executed with oscillation movements. The filigrane structure of the profile is ground with 20° pointed wheels. Probing measures the orientation on the reference V of the insert and if necessary the eccentricity.



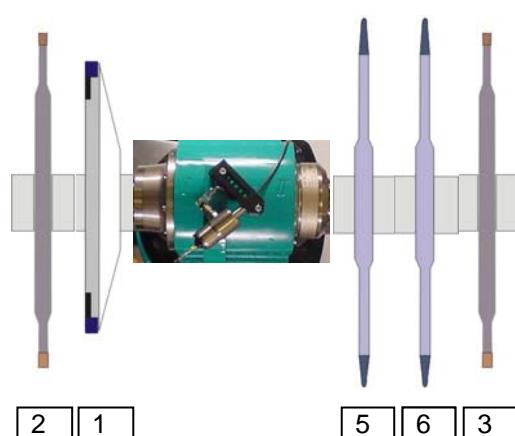
1. Cycletime for Production

Workpiece:	V-Form IØ 12.7, B= 22 mm Material CARBIDE							
Operations	Probe	V-face	Side	Chipbreaker	Prf Rough	Prf Pgrd	Prf finish	Prf polish
Feed [mm/Min]	2000	5000	5000	150	20	35	50	60
Power [kW]		1	1	1	2	1	1	1
Cutting speed [m/s]		22	22	22	22	22	22	22
Used wheels		1	1	2	3	4	5	6
Grinding time [s]	28	101	101	43	222	152	131	122
Total cycle time	14 Min 59							

The cycle times are indicative. Material to be ground, grinding wheels, coolants can influence the cycle times considerably.

2. Used Grinding Wheels

1	12C9 Ø250 D64
2	14A1 Ø250 D64
3	14A1 Ø250 D64B1.4
4	14EE1 Ø250 D76V20°
5	14EE1 Ø250 D46V20°
6	14EE1 Ø200 D64



3. Machine and Software Requirements

Machines: 5 axes CNC grinders : SIRIUS HPM

Coolant: Synthetic Oil, pressure 6 bar

Control: Fanuc 310i

Software: Quinto 5

Accessories:

Responsible engineer: OP. 13.1.12

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